Chang Liu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8403589/publications.pdf

Version: 2024-02-01

29 papers	2,211 citations	257101 24 h-index	476904 29 g-index
29 all docs	29 docs citations	29 times ranked	3519 citing authors

#	Article	IF	Citations
1	Maximum Surface Charge Density for Triboelectric Nanogenerators Achieved by Ionizedâ€Air Injection: Methodology and Theoretical Understanding. Advanced Materials, 2014, 26, 6720-6728.	11.1	517
2	Noncontact Free-Rotating Disk Triboelectric Nanogenerator as a Sustainable Energy Harvester and Self-Powered Mechanical Sensor. ACS Applied Materials & Interfaces, 2014, 6, 3031-3038.	4.0	217
3	Enhancing the Photocatalytic Activity of Anatase TiO₂ by Improving the Specific Facetâ€Induced Spontaneous Separation of Photogenerated Electrons and Holes. Chemistry - an Asian Journal, 2013, 8, 282-289.	1.7	115
4	Intensive Exposure of Functional Rings of a Polymeric Holeâ€Transporting Material Enables Efficient Perovskite Solar Cells. Advanced Materials, 2018, 30, e1804028.	11.1	104
5	Hydrophobic Cu₂O Quantum Dots Enabled by Surfactant Modification as Top Holeâ€Transport Materials for Efficient Perovskite Solar Cells. Advanced Science, 2019, 6, 1801169.	5.6	101
6	Remarkable electron and phonon band structures lead to a high thermoelectric performance ZT > 1 in earth-abundant and eco-friendly SnS crystals. Journal of Materials Chemistry A, 2018, 6, 10048-10056.	5.2	90
7	Efficient and Stable Perovskite Solar Cells Prepared in Ambient Air Based on Surface-Modified Perovskite Layer. Journal of Physical Chemistry C, 2017, 121, 6546-6553.	1.5	84
8	High-Performance Sodium-Ion Batteries Based on Nitrogen-Doped Mesoporous Carbon Spheres with Ultrathin Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 2970-2977.	4.0	82
9	Black phosphorus quantum dots as dual-functional electron-selective materials for efficient plastic perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 8886-8894.	5.2	80
10	Hydrothermally Treated SnO₂ as the Electron Transport Layer in Highâ€Efficiency Flexible Perovskite Solar Cells with a Certificated Efficiency of 17.3%. Advanced Functional Materials, 2019, 29, 1807604.	7.8	72
11	Sideâ€Chain Engineering on Dopantâ€Free Holeâ€Transporting Polymers toward Highly Efficient Perovskite Solar Cells (20.19%). Advanced Functional Materials, 2019, 29, 1904856.	7.8	69
12	Ionic liquid modified SnO₂ nanocrystals as a robust electron transporting layer for efficient planar perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 22086-22095.	5.2	66
13	A Review on Solutionâ€Processable Dopantâ€Free Small Molecules as Holeâ€Transporting Materials for Efficient Perovskite Solar Cells. Small Methods, 2020, 4, 2000254.	4.6	64
14	Facile fabrication of highly efficient ETL-free perovskite solar cells with 20% efficiency by defect passivation and interface engineering. Chemical Communications, 2019, 55, 2777-2780.	2.2	61
15	Highly Stable and Efficient Perovskite Solar Cells with 22.0% Efficiency Based on Inorganicâ€“Organic Dopantâ€Free Double Hole Transporting Layers. Advanced Functional Materials, 2020, 30, 1908462.	7.8	59
16	Formaldehyde-assisted synthesis of ultrathin Rh nanosheets for applications in CO oxidation. CrystEngComm, 2013, 15, 6127-6130.	1.3	55
17	Hole-transporting layer based on a conjugated polyelectrolyte with organic cations enables efficient inverted perovskite solar cells. Nano Energy, 2019, 57, 248-255.	8.2	52
18	Organic Monomolecular Layers Enable Energy-Level Matching for Efficient Hole Transporting Layer Free Inverted Perovskite Solar Cells. ACS Nano, 2019, 13, 1625-1634.	7.3	41

#	Article	IF	Citations
19	Crystallization manipulation and morphology evolution for highly efficient perovskite solar cell fabrication via hydration water induced intermediate phase formation under heat assisted spin-coating. Journal of Materials Chemistry A, 2018, 6, 3012-3021.	5.2	40
20	Accelerating the Screening of Perovskite Compositions for Photovoltaic Applications through Highâ€Throughput Inkjet Printing. Advanced Functional Materials, 2019, 29, 1905487.	7.8	37
21	Bifunctional Passivation through Fluoride Treatment for Highly Efficient and Stable Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	37
22	Side-Chain Polymers as Dopant-Free Hole-Transporting Materials for Perovskite Solar Cellsâ€"The Impact of Substituentsâ€™ Positions in Carbazole on Device Performance. ACS Applied Materials & Interfaces, 2019, 11, 26928-26937.	4.0	36
23	Fabricating Highâ€Efficient Bladeâ€Coated Perovskite Solar Cells under Ambient Condition Using Lead Acetate Trihydrate. Solar Rrl, 2018, 2, 1700214.	3.1	29
24	Polystyrene with a methoxytriphenylamine-conjugated-thiophene moiety side-chain as a dopant-free hole-transporting material for perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 13123-13132.	5.2	29
25	A dual function-enabled novel zwitterion to stabilize a Pbâ€"I framework and passivate defects for highly efficient inverted planar perovskite solar cells. Chemical Communications, 2020, 56, 6929-6932.	2.2	26
26	Simple and low-cost thiophene and benzene-conjugated triaryamines as hole-transporting materials for perovskite solar cells. RSC Advances, 2017, 7, 45478-45483.	1.7	17
27	Tetrabenzotriazacorrole and its derivatives as undoped hole transporting materials for perovskite solar cells: Synthesis, device fabrication, and device performance. Journal of Energy Chemistry, 2020, 43, 139-147.	7.1	16
28	Triazatetrabenzcorrole (TBC) as efficient dopant-free hole transporting materials for organo metal halide perovskite solar cells. Dyes and Pigments, 2018, 159, 600-603.	2.0	14
29	A dispersive scattering centers-based strategy for dramatically enhancing the photocatalytic efficiency of photocatalysts in liquid-phase photochemical processes: a case of Ag nanosheets. Nanoscale, 2013, 5, 1793.	2.8	1